UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,528	04/20/2004	Dibyapran Sanyal	200400478-2	2967

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EXAMINER
NGUYEN, PHILLIP H

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 May 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-23</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to the amendment filed on 5/22/2007.

2.   Claims 1-23 are pending and have been considered below.

Response to Arguments

3.   Applicant's arguments filed 5/22/2007 have been fully considered but they are

not deemed persuasive.

Applicant asserts on page 5 of the amendment that Fischer is commonly

assigned to Hewlett-Packard Development Company, L.P. and thus is not available

under 35 USC § 103(c) as prior art. 35 USC § 103(c) provides that "subject matter

developed by another person, which qualifies as prior art only under one or more of

subsections (e), (f) and (g) of section 102 of this title, shall not preclude patentability

under this section where the subject matter and the claimed invention were, at the time

the invention was made, owned by the same person to an obligation of assignment to

the same person." Accordingly, the rejection should be withdrawn.

Examiner respectfully disagrees with the allegation as argued. Examiner

aggress that Fischer is commonly assigned to Hewlett-Packard Development Company,

L.P. However, Fischer qualifies as prior art under 102(b) NOT (e), (f) or (g). Therefore,

35 USC § 103(c) is not invoked.

Note

1.   Regarding claims 1-5, 10, 11-15, 20, and 21, recite the phrase "for" in the body and preamble of the claims. It indicates intended use and as such does not carry patentable weight. Limitations following the phrase "for" describe only intended use but not necessarily required functionality of the claims. The word could be changed to recite "to" instead. For example, claim 1 recites, "for extracting" should be changed to "to extract". In order to these limitations to be considered, applicant is required to amend the claims so that the claim limitations are recited in a definite form.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 11-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

- Regarding claims 11, recites a apparatus but it appears reasonable to interpret this apparatus by one of ordinary skill in the art as software, per se. Applicant's specification provides no explicit and deliberate definition of the components ("source model", "target model", "mapping", "routine generator") that make up the system other than they could be software components, which are directed to functional descriptive material, per se, and are therefore non-statutory. Claims 12-20 directly or indirectly depend on claim 11 and therefore have been addressed in connection with the rejection set forth to claim 11 above.

- Regarding claims 21, recites a computer program, which is directed to software per se, lacking of storage on a medium, which enables any underlying functionality to occur. Claims 22 and 23 are directly depend on claim 21 and therefore have been addressed in connection with the rejection set forth to claim 21 above.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 7 recites the limitation "said model". There is insufficient antecedent basis for this limitation in the claim. It is unclear to Examiner whether Applicant is referred to "source model" or "target model".

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-9, 11-19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (United States Patent Application Publication No.: US 2003/0014550 A1), in view Larson (United States Patent No.: 4,729,096).

As per claims 1, 11 and 21:

Fischer discloses a method for creating data transformation routines for binary data for transforming said data from a source format to a target format, the method comprising the step of:

- generating a source model of a source format element ("**a first data structure is declared that a compiler, for example a C compiler, interprets as packed**" [0027]);

- generating a target model of a target format element ("**a second data structure is declared that the compiler interprets as unpacked**" [0027]);

- generating a mapping between said source model and said target model ("**the data is copied from the original packed data structure to the second, unpacked data structure using the pointer receiving the cast at 715. The pointer receiving the cast at 715 causes the compiler to treat data read from the original packed data structure at 720 as packed data so that is may be correctly copied to the second, unpacked data structure**" [0027], **the mapping must be existed in order to the processor to correctly copied to the second data structure**).

Fischer does not explicitly disclose:

- generating a transformation routine based on said mapping for extracting data from said source element and depositing said data in said target element.

Larson discloses an analogous method for generating a translator program.

- generating a transformation routine based on said mapping ("**The code generator 10a1B generates a translator program that will process the user's source code**" col. 7, line 36-37) for extracting data from said source element and depositing said data in said target element.

However, it would have obvious to one having an ordinary skill in the art at the time the invention was made to modify Fischer's approach to generate a routine.

Therefore, one of ordinary skill in the art would have been motivated to modify to ("**develop the translator program for utilizing the it to create object code from a user's source code**" col. 3, line 35-37)

As per claims 2 and 12:

Fischer further discloses:

- target models are generated for a plurality of target elements and a mapping generated between the source model and said plurality of target models (**a data structure contains many models and each model contains multiple elements**).

As per claims 3 and 13:

Fischer further discloses:

- source models are generated for a plurality of source elements and a mapping generated between said plurality of source models and said target model (**a data

structure contains many models and each model contains multiple

elements).

As per claims 4 and 14:

Larson further discloses:

- transformation routine is arranged for transforming data in software code

 instructions from a source format code to a target format code and said routines

 are generated in said target format code ("**develops a translator program**

 capable of transforming a user's source code into object code" see

 abstract).

As per claims 5 and 15:

Fischer further discloses:

- the mapping accounts for differences in endianness between the source and

 target models ("**convert them from little-endian format to big-endian format.**

 That is, it reverses the order of the bytes in data structure" [0024]).

As per claims 6, 16 and 23:

Larson further discloses:

- the transformation routine is executed at the runtime of a program in said source

 code (**the translator program is executed at the runtime of a program in the**

 source code in order to transform the source code into object code).

As per claims 7 and 17:

Fischer further discloses:

- said models relate bit positions to variable names for any given instruction ("**the structure "mystruct" maps well to a packed data structure comprising 16-bit integer "a" followed by a 32-bit integer "b""** [0029]).

As per claims 8 and 18:

Fischer further discloses:

- a group of source models and target models are provided wherein one or more models are applicable to a plurality of respective source or target instructions (**a data structure contains many models and each model contains multiple elements. Therefore, one or more of models are applicable to either source or target instruction**).

As per claims 9 and 19:

Fischer further discloses:

- said transformation routine is associated with a template providing a set of target format instructions semantically equivalent to said identified source instruction (**first data structure (packed data structure) and second data structure (unpacked data structure) are equivalent in order to correctly transform from packed to unpacked data structure**).

As per claim 22:

Larson further discloses:

- said transformation routines are implemented as routines in said computer

 program ("**a translator program capable of transforming a user's source**

 code into object code" see the abstract; **this means, the translator program**

 is implemented as routines in computer program).

8.   Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Fischer et al (United States Patent Application Publication No.: US 2003/0014550

A1) and Larson (United States Patent No.: 4,729,096), in view of MacLeod et al. (United

States Patent No.: US 6,356,901 B1).

As per claims 10 and 20:

Fischer and Larson disclose the method as in claim 1 above, but does not explicitly

disclose:

- the transformation routine is arranged for transforming data from a database

 between a source database format to a target database format.

However, MacLeod discloses an analogous method for transforming data between

databases:

- the transformation routine is arranged for transforming data from a database

 between a source database format to a target database format ("**the**

transformation of data as it moves from source database to a destination

database" col. 3, line 51-52).

Therefore, it would have been obvious to one having an ordinary skill in the art at the

time the invention was made to modify Fischer and Larson's approaches to also

perform transformation of data between databases. One of ordinary skill in the art

would have been motivated to modify because it safe time and money when updating a

newer version of database without re-creating a new database.

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Phillip H. Nguyen whose telephone number is (571)

270-1070. The examiner can normally be reached on Monday - Thursday 10:00 AM -

3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wei Y. Zhen can be reached on (571) 272-3708. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PN
8/2/2007

WEI ZHEN
SUPERVISORY PATENT EXAMINER